

C-A OPERATIONS PROCEDURE MANUAL

C-A TPL 05-05 TEMPORARY PROCEDURE: INTENTIONAL BEAM LOSS DURING STUDIES USING C-AD ACCELERATORS

Text Pages 2 through 4

Hand Processed Changes

HPC No.	Date	Page Nos.	Initials
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Reviewed by: _____
Date

Approved by: _____
Assoc. Chairman for ESHQ Date

P. Ingrassia

C-A TPL 05-05 TEMPORARY PROCEDURE: INTENTIONAL BEAM LOSS DURING STUDIES
USING C-AD ACCELERATORS

1. Purpose

- 1.1 The purpose of this procedure is to list requirements for beam studies where the **intent** of the study is to **lose/dump/crash/scrape** some or all the beam on an aperture or obstruction in one of the C-AD accelerators.

2. Responsibilities

- 2.1 The Operations Coordinators and the cognizant accelerator physicist for the study are responsible for the execution of this procedure.
2.2 The cognizant physicist is responsible for counting the number of ions lost during the experiment.

3. Prerequisites

- 3.1 The training requirement for this procedure is read and sign.
3.2 The minimum number of staff members that need to be trained in order for this procedure to be effective is three, one OC, one MCR Operator, and the cognizant accelerator physicist who is responsible for the beam study.

4. Precautions

- 4.1 Beam loss has implications for ground water activation. Every attempt must be made to restrict beam loss to the period of the study and short periods during setup.

5. Procedure

5.1 Before conducting the experiment

- 5.1.1 The cognizant physicist will determine a means to account for the number of ions intentionally dumped during the study.
5.1.2 The cognizant physicist fills out attachment 8.1 "Requirements for Studies Involving Intentional Beam Loss"
5.1.3 The Radiation Safety Committee Chairman or his designee approves and signs attachment 8.1
5.1.4 The Operations Coordinator permits the study to take place after it is signed by the RSC representative

5.2 After the experiment

- 5.2.1 The cognizant physicist shall record on attachment 8.1 the number of ions dumped.

5.3 Repeating the Experiment

- 5.3.1 Repeating the experiment requires the cognizant physicist to fill out a new "Requirements for Studies Involving Intentional Beam Loss" form and to get RSC approval.

6. Documentation

6.1 Completed Attachment 8.1 filed in "Beam Studies" 3 ring binder in MCR

7. References:

7.1 None

8. Attachments:

8.1 Requirements for Studies Involving Intentional Beam Loss

Attachment 8.1 Requirements for Studies Involving Intentional Beam Loss

Study number (eg. 05-01) _____ **Date** _____

Responsible Physicist _____

Affected Machine (RHIC blue/RHIC yellow, AGS etc.): _____

Describe the Proposed study: _____

Intended Beam loss point(s) _____

Limit on the number of dumped particles _____

Special Instructions/Requirements from RSC Chair/designee _____

RSC Chairman (or designee) approval _____ **date** _____

Operations Coordinator _____ **date** _____

Number of particles actually dumped _____

Cognizant Physicist _____ **date** _____